COVID-19 has demonstrated the critical need for a more proactive approach to preparing for highly-infectious diseases, unexpected pathogens, biological attacks and public health threats. The University of Nebraska is a national leader in the training of healthcare providers, establishing clinical resources, and developing strategies to fight emerging infectious disease threats and public health challenges with a robust network of healthcare and research partners.

The Global Center for Health Security at the University of Nebraska Medical Center (UNMC) (https://www.unmc.edu/healthsecurity/) is home to the national Training, Simulation and Quarantine Center (TSQC), which features the nation’s only federal quarantine unit and simulated biocontainment units for advanced experiential training. The TSQC encompasses an entire floor of the Dr. Edwin G. & Dorothy Balbach Davis Global Center on UNMC’s Omaha campus which opened in 2020. The TSQC was funded by a $20 million long-term contract awarded in 2016 by the U.S. Department of Health and Human Services. Quarantine and training services are managed by the Global Center for Health Security which coordinates clinical care, research, and training on a national scale with international collaborations.

People all over the world know of the internationally acclaimed Nebraska Biocontainment Unit team, which developed the “Nebraska method” to set the standard for safely treating highly-infectious pathogens during the 2014 Ebola outbreak. The Global Center for Health Security coordinates an international network of labs and delivers training to prepare healthcare workers for emerging highly-infectious threats. With Emory University in Atlanta, Georgia, and New York City’s Bellevue Hospital, UNMC founded the National Emerging Special Pathogens Training and Education Center (NETEC), which now includes ten regional hospitals strategically located around the nation. UNMC also contracted with the U.S. Department of Health and Human Services Assistant Secretary of Preparedness and Response to develop a regional disaster health response system model that could be replicated in other states with current partners in this effort located in Boston, Massachusetts, and Denver, Colorado.

In 2018, the Air Force established a C-STARS (Center for the Sustainment of Trauma and Readiness Skills) Infectious Disease program at UNMC, stationing active-duty Air Force personnel on campus to train and work with UNMC experts. In 2017, UNMC and UNL researchers and the National Strategic Research Institute (NSRI) at the University of Nebraska launched a drug development pipeline program with the U.S. Armed Forces Radiobiological Research Institute to advance compounds with a national need to clinical trials, starting with a drug to mitigate the deadly effects of severe radiation exposure. UNMC has a 30-year history of research funded by the U.S. Department of Defense to develop medical countermeasures against biologic threats. In addition, University of Nebraska faculty across our four campuses are building teams to address other public health challenges like the spread of pathogens carried by ticks and developing innovative approaches to combat social isolation and health declines in older adults, especially evident during the pandemic.